DOCUMENT RESUME

ED 326 292 JC 910 031

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TITLE Golden State...Golden Opportunity: Vocational Education and Economic Development in California Community Colleges. An Issue Paper.
INSTITUTION Chief Executive Officers of the California Community Colleges.
PUB DATE Mar 90
NOTE 45p.
PUB TYPE Information Analyses (070) -- Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Administrators; Boards of Education; College Planning; College Role; *Community Colleges; *Economic Development; Educational Administration; *Educational Assessment; *Educational Legislation; *Institutional Mission; Policy Formation; School Business Relationship; Two Year Colleges; *Vocational Education
IDENTIFIERS *California

ABSTRACT

Intended as the beginning of an ongoing review of the California Community Colleges' (CCC) vocational education programs, academic certificate and degree programs, and short-term job skills and retraining programs, this paper sets out to: define economic development and clarify its role in the community college context; develop a consensus among chief executive officers regarding the definition and role of economic development; raise the consciousness of community college leaders at the state and local levels about the need for and potential of economic development activities; and develop specific recommendations to improve vocational education and economic development programs in the CCC. The paper is divided into six main sections. Following a brief introduction, section II presents a glossary of terms related to the concepts of vocational education and economic development. Section III discusses the problems faced by community college's in providing for effective vocational training in light of the growing emphasis on transfer education. Section IV discusses the implications of Assembly Bill 1725 and the final report of the Joint Legislative Committee on Vocational Education. Section V presents a proposed policy statement for the CCC, examining institutional mission as it relates to economic development. Section VI consists of a set of recommendations from the Chief Executive Officers of the CCC to the Board of Governors, the Chancellor's Office, and the district offices. A literature review, the Board of Governors' vocational education/employment training policy, and a list of vocational education courses in the CCC are appended. (JMC)

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GOLDEN STATE . . . GOLDEN OPPORTUNITY
VOCATIONAL EDUCATION AND ECONOMIC DEVELOPMENT
IN CALIFORNIA COMMUNITY COLLEGES:
AN ISSUE PAPER

March 1990

CHIEF EXECUTIVE OFFICERS
CALIFORNIA COMMUNITY COLLEGES

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VOCATIONAL EDUCATION

Vocational Education focuses on meeting the needs of individual students, and is defined as single courses, clusters of courses, certificate programs, Associate of Arts or Science degrees with vocational majors, and/or all attendant activities which prepare students for employment.

ECONOMIC DEVELOPMENT

Economic Development focuses on meeting the needs of business and industry, and is defined as the specialized services and programs provided to the community, businesses and industries to enhance economic vitality.

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I. INTRODUCTION

Vocational Education[1] is one of the two primary missions of the California Community Colleges. An estimated 670,000 out of the total 1.3 million California community college students, one out of two, are taking business, professional, or other vocational or job training courses. With almost 500 different program titles and more than 5,200 separate programs, community colleges are by far the largest source of employment preparation.[2] The broad social and economic roles of the system have been affirmed by Governor George Deukmejian who has stated that "our community colleges, the largest college system in the United States, will help facilitate the complex mission of unifying people, developing improved economic programs and providing a resource of services to boost the state's economy and propel California into the 21st Century."[3]

The 1989-90 Basic Agenda of the Board of Governors, California Community Colleges, states, "The Board proposes to reaffirm its strong support of vocational education which is equal in importance to transfer education" and sets forth to "play a more significant role in strengthening economic development in California."[4] This commitment of the Board of Governors is not new. In January 1984, the Board of Governors adopted a major policy statement on vocational education suggesting an expanded role for colleges in employment training. As part of that new direction, the policy included the following statement:

> *The California Community Colleges Board of Governors shall provide leadership and promote efforts to ensure that community colleges serve as the primary and presumptive delivery system for adult vocational education and employment training programs in California.*[5]

In January 1989, the Board of Governors approved the *California Plan for Career-Vocational Education, Part One: Policy Directions*. It states "the mission of career-vocational education in California is to enhance the personal and economic well-being of individuals and to develop human resources which contribute to the economic development of the state." It continues "To accomplish its mission, career-vocational education must establish and strengthen partnerships with employers, labor, government, and other appropriate public and

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[1] The authors have elected to be consistent with Federal and State legislation and publications, which have returned to the use of "Vocational Education" rather than "Technical" or "Occupational Education."

[2] Berman, Weiler Associates, "A Study of California's Community Colleges: Volume 1, Summary and Conclusions," p. 21.

[3] "California Ed>Net: A Unique Approach To Networking Community College Economic Development Programs," ED>Net Advisory Committee, November 28, 1989).

[4] "1989-90 Basic Agenda," Board of Governors of the California Community Colleges, December 1989.

[5] "Vocational Education/Employment Training Policy," Board of Governors of the California Community Colleges, January 26, 1984.

private agencies to ensure that students are prepared to seek and obtain work, hold employment, advance in their chosen careers, and adjust to changing labor market demands."[6]

The Review of the Master Plan for Higher Education and its implementing legislation, AB 1725, which went into effect on January 1, 1989, have mandated a sharper institutional focus on the traditional college missions of lower-division instruction leading to transfer to a four-year university and vocational education.

The Legislature recognized that current vocational programs, which include academic certificate or degree programs and short-term job skills and retraining programs, are essential to meet the rapidly shifting needs of the California economy. "The dramatic changes in California's economy will require, however, an ongoing and thorough review of the relevance and responsiveness of current vocational programs, as well as the relationship between those programs throughout the state."[7]

The Chief Executive Officers California Community Colleges (CEOCCC) proposes to begin that review with this issue paper on vocational education. The purposes of the paper are to:

1. define "economic development" and clarify its role in the community college context;

2. develop consensus among CEO's regarding the definition and role of economic development;

3. raise the consciousness of community college leaders at the state and local levels about the need for and potential of economic development activities; and

4. develop specific recommendations to improve vocational education and economic development programs in the California Community Colleges.

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[6] California State Department of Education and Chancellor's Office California Community College, *California Plan for Career-Vocational Education, Part One: Policy Directions*, January 1989, p.11.

[7] AB1725, Sec. 2 (d).

II. VOCATIONAL EDUCATION AND ECONOMIC DEVELOPMENT: DEFINITIONS

Californians believe in vocational education which prepares people for jobs. They also believe in economic development activities which prompt business and industry to create and expand employment opportunities for a growing population. Evidence of this belief is found in many places. Students in large numbers enroll in community college courses which focus on job training. The California Legislature and Governor recently reaffirmed through the enactment of state law that vocational education was one of two major missions of the community college. Local community college boards of trustees have, in policy manuals and in college catalogs, incorporated mission statements that clearly state that vocational education is a major function of the community college.

From the inception of the first California "junior college" in 1910 to the establishment of the modern, comprehensive "community college," these institutions have assisted in the development of the local economy. The economic impact has included the effects of the local community college payroll on the local economy along with the positive impact of a more highly trained work force. When junior colleges were first established, their primary mission was to prepare students for transfer to the university. The curriculum was a clone of years one and two of the University of California, Berkeley. However, as early as 1910, preparation for an industrial economy through vocational education was a function at Fresno Junior College. By World War II, more than a third of the junior college students were participating in occupational courses in California. Today the emphasis on transfer remains and has been renewed. However, from the decade of the 1960's forward, vocational education has developed into the other major mission of the California Community Colleges. Preparing people for work from entry levels to advanced levels occurs in almost every community college, with more than half of California's students enrolled in at least one vocational course. Approximately 35 percent of the credit instructional workload has been in vocational courses with 340 occupational specialties taught throughout the state. In 1982-83, approximately $315 million (39 percent) of community college instructional expenditures were for vocational programs.[8]

The term ***vocational training*** has been used through the years to generally describe community college efforts to prepare students for the work place. In the last few years the term ***economic development*** has been used by community colleges to describe developing relationships and activities with business and industry. How do these newer activities relate to vocational education? Is this new direction toward economic development leading to a different approach or perhaps a different emphasis in job training? ***Vocational education*** is the terminology generally used for activities on the campus or within traditional college norms and environments to prepare students for employment. Economic development activities, on the other hand, have traditionally been defined as those services provided to business and industry by community colleges, typically in off-campus locations. Definitions for ***vocational education*** and ***economic development*** for community colleges are suggested based on their purposes and characteristics.

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[8] "Stats and Facts," The California Community Colleges, 1984, p. 11.

VOCATIONAL EDUCATION

Vocational Education focuses on meeting the needs of individual students, and is defined as single courses, clusters of courses, certificate programs, Associate of Arts or Science degrees with vocational majors, and/or all attendant activities which prepare students for employment.

The California Plan for Career-Vocational Education, Part One: Policy Directions, notes that vocational education (also called Occupational Education) refers "to a planned, systematic sequence of instruction or other learning experiences which provide individuals with necessary skills, knowledge, and attitudes to attain entry-level employment, occupational advancement, upgrading, or career change. Such occupational preparation should be accompanied by broader educational experiences to assist students to achieve longer range career aspirations as well as immediate occupational objectives and is usually of longer duration than shorter-term job training."[9]

Following are seven components of vocational education which traditionally support the concept of providing programs to meet the individual needs of students:

VOCATIONAL COURSES/PROGRAMS/DEGREES. The instructional program of the community college includes many courses which prepare students for specific entry-level employment or employment advancement. Along with single courses related to specific jobs, clusters of courses often will be recommended to students for job preparation. These clusters may also include courses in basic skills such as reading, writing, mathematics and oral communications. In many vocational disciplines certificates will be given to students for course or program completions and/or skills attainment. Associate of Arts or Science Degrees are given for vocational majors in disciplines such as business, health and nursing, family and consumer education, crafts and trades, electronics, public service such as police and fire science, communications and many others.

JOB TRAINING. "Job Training" (also called employment training) refers to a planned systematic sequence of instruction or other learning experiences designed to impart skill, knowledge, and attitudes to prepare individuals for immediate employment. Such training is usually intensive, job specific, and of short duration. . . . It is understood that employment training is an integral part of vocational education."[10] *Vocational education* is the more general term referring to training in skills applicable to a broad range of employers, while *job training* is more specific to one employer or a small group of employers.

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[9] California State Department of Education and Chancellor's Office California Community Colleges, *California Plan for Career-Vocational Education, Part One: Policy Directions*, January 1989, p.11.

[10] This definition was approved in a policy paper presented to the Board of Governors, January 1984.

ADVISORY COMMITTEES. In each discipline or major vocational instructional area, advisory committees consisting of community experts in the field provide valuable input on availability of jobs, the curriculum and work experience opportunities. These committees ensure content relevance in the courses that are offered and help establish overall goals for the programs. Additionally, advisory committees assist in the evaluation of the programs.

CAREER CENTERS. Community colleges have established career centers to provide employment and job information to students. Most colleges have computer-generated, up-to-date information about hundreds of careers. Data include (1) required training; (2) location and availability of jobs; (3) training sites; (4) job descriptions; and (5) salary and benefits. These functions are an extension of counseling services for students.

COOPERATIVE EDUCATION/WORK EXPERIENCE. Cooperative Education is best described as an instructional arrangement between the student, the college and the employer of the student. On-the-job training becomes a significant component in the students' education. Cooperative education, often called work experience, may occur while students are attending college full-time and working part-time. In some models students go to college full-time, then work full-time, and finally return to college full-time. These work-study arrangements are referred to as parallel plans or alternate plans.

ARTICULATED INSTRUCTIONAL PROGRAMS. Community colleges in greater number are establishing working relationships with high schools and four-year institutions to provide continuity of programs across the segments. Various forms of articulation efforts are referred to as "two-plus-two" programs between high schools and the community colleges or between the community colleges and the universities. If they include all three segments they are called 2+2+2 programs. With the increased demand for technically trained employees, cooperative programs are being developed between community colleges and universities in such areas as electronics/computer science, health careers, agriculture, business and public service occupations.

JOB PLACEMENT CENTERS. As part of the student services operation of colleges, job placement centers are organized to provide specific employment opportunities to students. Job placement centers typically have a listing of jobs available to students while they are in college and/or for summer employment. They also provide employment information for graduates and arrange interviews with students and prospective employers.

APPRENTICESHIP TRAINING. By State law, community colleges may sign training agreements with joint apprenticeship training committees to provide classroom instruction and on-the-job training in the crafts and trades for carpenters, electricians, plumbers, floor-covering workers, painters, brick layers and tile-setters, cement masons and plasterers, operating engineers, sheet metal workers, and for other jobs represented by trade unions. Separate funding on an hourly basis is allocated to colleges and shared with unions in this cooperative training program.

ECONOMIC DEVELOPMENT

Economic Development focuses on meeting the needs of business and industry, and is defined as the specialized services and programs provided to the community, businesses and industries to enhance economic vitality.

This definition of economic development is somewhat narrow in that it essentially describes services afforded business and industry by community colleges. The definition could be broadened to include all courses and all activities which assist students in becoming productive members of the community. To the extent individuals are literate, are skilled workers, and have an understanding of social issues is the extent to which they contribute to the political, social and economic life of the community. In that context all efforts of community colleges enhance the economic development of the community and the state. However, the more precise definition describes in a realistic way community colleges' involvement directly with economic development.

The mission of a recently formed state consortium of community colleges, The Economic Development Network (Ed>Net), is to coordinate and facilitate economic development activities of California Community Colleges and to provide training and technical assistance on economic development issues to improve effectiveness in delivering services to business, industry and government. Some of the economic development activities in which community colleges are involved include:

COOPERATION WITH COMMUNITY AGENCIES IN ECONOMIC DEVELOPMENT ACTIVITIES. Most local government/businesses have economic development councils or committees of various forms to attract business and industry. Community colleges are part of this structure as the major provider of vocational training.

Various local agencies work together in assessing the training needs of business and industry in each locale. A few community colleges cooperate in these research endeavors and will direct the research in certain instances. Local agencies such as the Employment Development Department, local offices of the Job Training Partnership Act, and economic development councils are usually involved with colleges in identifying the generic training needs of business and industry and also in citing the community resources that are available to meet the identified needs.

PARTNERSHIPS WITH BUSINESS AND INDUSTRY. Business firms in California are forming partnerships with local community colleges which benefit both. Specific courses with specialized content and advanced technological tools are features of partnerships with business and industry. Computer hardware and software companies may make their products available free-of-charge to col' ges in order for students to gain operational knowledge of their systems. Likewise, manufacturers may donate expensive equipment for student use as well as provide scholarships and equipment for students who are potential employees.

COORDINATING EXTERNAL PUBLIC-FUNDED JOB TRAINING PROGRAMS. In California two major publicly funded job training opportunities are available to students. The federally-funded Job Training Partnership Act (JTPA) provides several alternative training modes including regular classes at the community college, contract instruction, student employment with work experience, and on-the-job training in private business. The state-funded program, Greater Avenues for Independence (GAIN), focuses on training welfare recipients with the goal of each recipient becoming economically independent of the State.

The California Employment and Training Panel (ETP) program supports employer-based training that directly responds to economic development objectives. The program funds training and retraining for dislocated and potentially dislocated workers, with an emphasis on increasing company productivity and preventing industry and business closings.

The Employer-Based Training (EBT) Program provides technical and skill-specific training in courses based on the needs of employers as well as those of the unemployed and underemployed. The program requires a close working relationship with business and industry leaders, who are actively involved in the development and evaluation of course requirements.

Colleges cooperate and/or coordinate in these various arenas depending upon the counties in which the colleges are located. Colleges also are involved in support services training with other public funds, such as child care and foster parent. Or, they may be involved in providing referral services for child care in which employees of companies are given significant information about services for their children. Career counseling and personal counseling are services for employees of companies often provided at company expense.

CONTRACT EDUCATION. This is an agreement between an employer and a college to provide specific training for employees of the company. The training may include specialized courses, regular college courses, or courses which vary in length from an hour to a semester or more. The course content may be determined by the company or by the company and the college jointly. College credit may be given for such courses; however, in some instances the courses may be non-credit or may be provided through community services. Funding for the courses is determined through a joint agreement with dispensation for student fees and other charges incorporated in the contract.

SMALL BUSINESS ASSISTANCE CENTERS AND DEVELOPMENT CENTERS. Small Business Assistance Centers in community colleges provide an array of short-term courses, seminars and conferences for the entrepreneur, established business owners and those contemplating a business venture. Finance, personnel, marketing, tax laws and required reporting are some of the topics presented. Community colleges also offer courses and seminars in writing grants, procuring contracts and the politics of being successful in securing such awards. They also provide sessions on interpersonal behavior that affects the outcome of grant applications and negotiations. Some assistance centers are supported from community college general funds or Chancellor's

Office EBT funds, which are not sufficient to meet the needs.

Department of Commerce funded Small Business Development Centers provide technical assistance in starting or maintaining a small business. The focus of these centers is on financing the establishment and expansion of small businesses. The centers also provide referral services and seminars.

INTERNATIONAL EDUCATION/TRADE. As California pursues a more aggressive posture in world trade, international education will expand in community colleges. In providing courses for foreign students, sending American students abroad for classes, offering seminars on language and customs of other cultures and actively recruiting foreign markets for American products, community colleges will be increasingly involved in international education and associated activities, all of which affect economic development. Through Ed>Net, information on international trade activities, international education curricula and sample articulation agreements with other educational providers have been developed.

APPLIED COMPETITIVE TECHNOLOGY CENTERS. As the universities and private industry complete research and develop technology, community colleges provide courses, seminars or other forms of training through which the research may be applied. Through a statewide consortium of colleges, training in handling and disposing of hazardous waste utilize recent research in practical applications. Research applications in agriculture have been taught through the community colleges as well as through the extension division of the University of California. Advanced Applied Technology Centers (ATC) located on community college campuses may serve as demonstration sites for computer integrated manufacturing and quality control.

III. THE PROBLEM

California Community Colleges have devoted a great deal of attention to Transfer Education in response to public concern and are achieving some success. Vocational Education, on the other hand, is one-half of the primary mission and enrolls more than half of the students of California community colleges, but has not yet received equal attention. Vocational Education and economic development have a strong support base among local employers and community leaders, and there is broad public understanding of its importance to local economies. Vocational Education is therefore capable of attracting public support for the California community college mission if it is given a leading role in the years ahead. Vocational education and economic development are golden opportunities for California Community Colleges.

Unfortunately, vocational education in California is, in the words of W. Norton Grubb, consultant to the Commission for the Review of the Master Plan for Higher Education, "complex, poorly coordinated, ungovernable, and therefore less effective than it could be, at the same time that education and training are crucial to the future of the state and country."[11] Now is the time for community colleges to address these issues.

The problem begins with the definition of terms. The Master Plan Commission and the Legislature in AB 1725 used **Vocational Education** in a generic sense to refer to vocational education, career education, job training, and employment preparation, each of which has a different meaning to area professionals and college administrators who are setting up the programs. Neither the Master Plan Commission nor the Legislature stated a desired balance in college programs between generalized skills and job specific skills. Given limited resources, a college must decide what that balance should be. There are incentives for going either direction. On one hand colleges know that specific training is highly attractive to federal and state funding agencies and private employers interested in job specific training. Students also often want short term, specialized skills for job entry. On the other hand, community colleges have been consistently criticized for skill training which is too narrow. The jobs of the future require flexible, adaptable lifelong learners, the argument goes, so broader general education is preferable and in the student's best long term interest. The Master Plan and the California Plan for Career-Vocational Education have noted that community colleges have a role in economic development; nonetheless, the expectations for community colleges have not been thoroughly developed.

The Mission Statement of the Board of Governors has not been reviewed in light of the recent legislative changes, nor is there a common, agreed upon statement of role or purpose for vocational education and economic development for individual colleges and districts to use as a guide. Consequently, the purposes and

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[11] W. Norton Grubb, "Vocational Education and Training in California," Issue Paper No. 8, Commission for the Review of the Master Plan for Higher Education, *Issue Papers: The Master Plan Renewed* (Sacramento, Ca. August 1987) p. 197.

scope of vocational education and economic development differ from college to college, as do the programs.

The need for statewide coordination of segmental missions and goals offers an opportunity for state leadership to provide direction to the many providers of vocational education in the state. The recent publication of the *California Plan for Career-Vocational Education, Part One: Policy Directions* by the California State Department of Education and the Chancellor's Office, California Community Colleges is an encouraging sign that a coordinating effort is under way. This publication states that "the mission of career-vocational education in California is to enhance the personal and economic well-being of individuals and to develop human resources which contribute to the economic development of the state."(p. 11)

The Chancellor and the Board of Governors have stressed the need to initiate an economic development program to serve employers. *Economic development* can mean many things, from standard credit coursework and programs to job training, to contract education with employers, to community development activities, business incubators and real estate or business development. Whether the latter activities are within the scope of the revised mission of community colleges is a question which needs to be explicitly addressed by the Board of Governors.

The governance problems related to the large number of agencies involved in vocational education, particularly in the employment training area, are unresolved. Numerous reports on vocational education in the state have pointed out the unclear lines of responsibility and authority, the duplication of programs, and the competition for limited resources.

The solution proposed by the Joint Legislative Committee in *California Faces . . . California's Future* is a strengthened research unit in CPEC to monitor labor market and other economic trend data. Earlier proposals to designate Community Colleges as the "presumptive deliverer" of vocational education did not find their way into the final recommendations.

Funding of vocational education is fragmented, not only among segments, but within the community college system itself. Some funding is based on Average Daily Attendance, some on grants, and some on inputs, outputs and performance. Formulas differ, as do administrative overhead percentages. Economic Development activities have no specified source, but usually come from local or private funds. Economic development projects which are launched with grants or donations create expectations among the public for continued funding by general fund monies when the grants terminate.

The need for state-of-the-art equipment, curriculum and trained staff is a critical concern in vocational education. The vigorous lifetime of a vocational program is becoming shorter and shorter as technological change accelerates. Vocational faculty have lifetime tenure in subject areas that often become obsolete in mid-career. Either special retraining programs or alternate forms of staffing are required to address this fundamental

issue. Community college staff generally are not prepared either academically or by experience to carry out economic development activities. Equipment obsolescence is a similar problem, with higher costs of items that are useful for shorter periods of time.

Changes in student demographics are also requiring increased institutional resources to prepare students not only in the basic skills of reading, writing and computation, but also in critical thinking, problem-solving, and adaptation to change. Responding to the vocational needs of a diverse student population is a major challenge.

The sustained growth in the percentages of foreign born, ethnic minority, re-entry women, and older adult populations, and the decline in traditional high school graduates will require a growing support structure of English language preparation, remedial instruction, financial assistance, career counseling and child care services. Over one-half (53%) of community college vocational students are women. Ethnically 64% are white, making them somewhat under-represented as a percentage of the state's population, as are Hispanics to an even greater degree. Blacks and Asians are over-represented. Community college vocational programs must not only strive to reflect the composition of the future workforce, but to insure that these diverse populations are successful in entering the workforce.

The role of vocational education within the institution is changing. Programs must prove themselves in many different ways; they must be cost effective, up-to-date, articulated with K-12 and four-year universities, and able to demonstrate performance through job placement statistics. Vocational educational faculty are being asked to participate in traditional forms of higher education governance such as Academic Senates, curriculum committees and faculty rank. Colleges are being encouraged to tie their vocational courses to both immediate and long-term labor-market requirements,[12] which will not be possible without greatly improved information and coordination at the state level.

College presidents are aware that the success of their institutions rests heavily on the success of their vocational programs. There is more at stake than local presidential and college reputations, however. It is also becoming clear that the success of California's economy and the competitiveness of its businesses and industries in the global economy will depend on whether vocational education and economic development efforts receive the required mandate, resources and institutional and governmental support.

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[12] Board of Governors, "1989-90 Basic Agenda," p. 7.

IV. IMPLICATIONS OF AB 1725 AND *CALIFORNIA FACES . . . CALIFORNIA'S FUTURE* ON VOCATIONAL EDUCATION

The language of AB 1725 raises Vocational Education and Transfer Education to the position of primary and coequal functions of the California Community Colleges. Pre-existing law included General Education, Counseling and Guidance, and Community Services in an equal position with Transfer and Vocational Education. Reduction of the primary mission to the latter two should result in a stronger and more focused institutional effort in both Transfer and Vocational Education.

In addition to a general review of the relevance and responsiveness of current vocational education programs and the relationship of these programs throughout the state, AB1725 directs the Chancellor's Office to:

1. initiate a detailed examination of the implications of current economic developments and trends;

2. review the curricular relationships between vocational and general education programs;

3. determine the extent to which students are under-represented in vocational education programs on the basis of gender and ethnic origin;

4. report on the completion of vocational programs; and

5. conduct a feasibility study on "interdisciplinary colleges" integrating vocational and academic study.

These studies will require a great deal of staff time within the Chancellor's Office, but will, if accomplished, provide a needed arena for policy development.

The legislation also directs the Board of Governors to assist school and community college districts in developing articulated vocational education programs in the 2+2 pattern. They are also required to work with California State University to include the baccalaureate in 2+2+2 programs. Completion date for these projects is July 1, 1991.

AB 1725 requires the Board of Governors to adopt minimum qualifications for each discipline to replace the now repealed credentialing provisions. This regulation establishes the bachelor's degree as the minimum degree for tenure. Since it is recognized that it may have a greater impact on vocational fields, it will not apply to vocational education until January 1, 1994.

An added concern for vocational programs may be that minimum qualifications are too restrictive. The impact of the 75% full-time faculty requirement will be felt primarily in areas which traditionally use large numbers of local practitioners such as police academies and specialized programs.

The final report of the Joint Legislative Committee, *California Faces . . . California's Future*, is an advisory document which may or may not be put into law. The report recommends that:

1. the State Job Training Coordinating Council coordinate development of an integrated system of planning, evaluation, and data collection on vocational education and job training;

2. the California Vocational Information Coordinating Committee develop and the Chancellor's office disseminate job skills and labor market information;

3. CPEC review all two- and four-year vocational programs, integrate its information with the student tracking system data, and report on the effectiveness of the programs to the Legislature every three years;

4. the Board of Governors develop an evaluation process for vocational education programs;

5. CPEC establish a research unit on the economy and economic data, and the Board of Governors develop a liaison unit with linkages to the CPEC research institute and business and industry;

6. each segment develop plans "to assure the widest and most appropriate participation of faculty, staff, and students in local, regional, and statewide economic and social development initiatives."

The Board of Governors of the California Community Colleges have incorporated the spirit of the recommendations of the Commission for the Review of the Master Plan and the Legislature's Joint Committee on the Master Plan into its 1989-90 Basic Agenda. Specifically, the Board proposes to:

- Reaffirm its strong support of vocational education, which is equal in importance to transfer education.
- Make vocational education programs more relevant and effective in preparing students for employment.
- Update the vocational curriculum by incorporating modern industrial techniques.
- Tie vocational courses to both immediate and long-term labor-market requirements.
- Increase the number of under-represented students in vocational education programs.[13]

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[13] Board of Governors California Community Colleges, "1989-90 Basic Agenda," September 1989.

V. PROPOSED POLICY STATEMENT

ECONOMIC DEVELOPMENT

GOLDEN STATE . . . GOLDEN OPPORTUNITY

California's $533 billion annual product is the sixth largest economy in the world. In addition to being large, the economy is remarkably diverse in both occupational categories (what workers do) and industrial categories (what workers produce). The work force is also ethnically and culturally diverse. Today California's elementary schools have a minority majority in the first three grades; by the end of the century, the population as a whole will be made up predominantly of members of minority groups.

California's resilient economy and its labor force will continue to grow, but so will the number of unemployed and underprepared. The number of drop-outs will increase with the growing numbers of students who are poor, do not speak English, or have physical or emotional handicaps. The average person will change careers about five times during a working life.

Technological change, growing global competition and the displacement of a production-based economy by an information society have changed the nature of the work place from a stable base of relative security to an uncertain and temporary respite from unemployment.

Educational and skill requirements for those entering as well as those already in the labor force are changing, requiring workers to possess skills in higher-order thinking, problem-solving, listening, negotiating and working on a team. Workers must know how to adapt to change and how to learn.

To meet the challenge, business and industry and the educational system will be required to interrelate on a more profound basis. Education will become more important in the mainstream of business and industry, and the business world will relate more closely with education.

INSTITUTIONAL MISSION AND ECONOMIC DEVELOPMENT

Vocational Education, along with Transfer Education, are the primary missions of the California Community Colleges. The state's 107 community colleges have a clear mandate to provide occupational education — single courses, certificate programs, A.A. or A.S. degrees with vocational majors, and short and long-term job training. These instructional programs are articulated with the business world through support structures such as advisory committees, career centers, cooperative education and work experience programs, job placement centers and apprenticeship programs. *Vocational education*, in short, is the terminology used for activities on the campus or within traditional college norms and environments.

Economic development activities have traditionally been defined as those services provided to business and industry by community colleges in off-campus environments and in non-traditional modes of instruction for the purpose of enhancing the economic vitality of the local service area. Examples include college participation in economic development councils, contract education, partnerships with business, small business assistance centers, coordination of external, public-funded job training, and international education.

The CEOCCC takes the broad view of the vocational education mission. That mission includes all courses and activities which assist students in becoming productive members of the community. To the extent that individuals are literate, numerate, skilled workers, and have an understanding of social issues is the extent to which they contribute to the economy. If they know how to learn, how to adapt to new situations, solve problems, and work with others, they will contribute to the economic development of their communities.

As institutions community colleges also hold the broader mandate to be active participants in their communities to enhance the local economy.

California Community Colleges take pride in and seek recognition for their role in the direct support of local business and industry. As the economy evolves in this, the post-industrial era, community colleges will play a critical role in insuring that all of the human potential of the American work force is utilized. It will not be sufficient that our research scientists and inventors produce the best ideas. A capable work force is essential to implement those ideas and carry them forward in practical ways.

COMMUNITY COLLEGES: A UNIQUE RESOURCE FOR ECONOMIC DEVELOPMENT

The California Community College system is well positioned to serve the economic development needs of the state. Geographically, the 71 districts in the system have 107 campuses and hundreds of education centers, branches and outreach locations located in every major population center in the state. Politically, each district is firmly rooted in the local community and governed by locally elected Boards of Trustees. Educationally, community college programs bridge the gap between research theory and business practice. These are powerful assets and serve to explain why organizationally, community colleges are the most flexible of educational institutions and are best able to respond quickly to changes in labor market demand and technological advances. The California Community Colleges are the primary delivery system for adult vocational education and employment training programs in California. Over half of the 1.3 million students enrolled in California's community colleges are enrolled in a vocational course.

As a highly diverse set of comprehensive and responsive colleges, California Community Colleges are uniquely positioned to respond to the economic development needs of the localities or regions they serve. As integral players in local, regional, and state economies, these institutions have a unique opportunity for leadership in bringing the essential players together. Community colleges develop insight into the nature of the economic

context of their service areas by asking such questions as:

- What are the issues facing the state and local economies?
- What are the state, regional, and/or local industrial bases?
- How has the economy evolved in the past decade?
- What are the future prospects for the economy?
- What are the major employers in the area?
- What are the current and future manpower needs of the economy?

An understanding of the current economic environment, combined with an awareness of available resources, serves as the basis for an institution to carve out its own niche in providing economic development services. The focus of the mission of the institution will specify particular strategies for delivering services that enhance economic development.

The key to successful involvement in economic development programs lies in the strategic development and application of an individual college's resources as well as a recognition of institutional limitations. This requires each institution to define its perspective, conduct a needs assessment, develop goals complementary to the overall institutional mission, and thus actively determine its individual role in economic development.

Many community colleges have defined their role in economic growth simply as the provider of an educated work force. Others provide technical assistance to local communities and small businesses, or design and promote special programs to foster private-sector development. These activities are targeted toward the specialized needs of the community and particular businesses and industries found in their areas of service. The areas of service will be defined by the college's mission and the strength of its programs. As open access institutions, community colleges are an egalitarian entry point to higher education, and through higher education to the world of productive satisfying work in the complex economy.

VI. RECOMMENDATIONS

The Chief Executive Officers California Community Colleges agree to work collectively and cooperatively to meet regional and state economic objectives, and urge the Board of Governors to work on our behalf to provide state funding to support the expansion of our role in economic development. To advance this goal the CEOCCC makes the following recommendations:

1. The Board of Governors should reaffirm its commitment to vocational education and adopt a clear statement of policy and direction regarding the role of community colleges in state and local economic development.

2. The Chancellor's Office of the California Community Colleges should provide statewide leadership focused on new directions and funding for an expanded role in economic development and vocational education.

3. Districts should work with the Chancellor's Office to strengthen vocational educational programs and expand economic development activities both at the state level and in their local communities.

4. Chief Executive Officers should exercise a strong leadership role on their campuses in advancing the vocational education mission and the economic development role.

5. To implement the new policy and direction the Chancellor's Office and CEOs should collaborate to:

   - Pursue a new funding base for economic development initiatives.
   - Gain a greater share of vocational education and training monies.
   - Provide continuity in equipment funding.
   - Improve the program approval process.
   - Create job placement and student follow-up centers paralleling the Transfer Center concept.
   - Address the vocational education needs of an increasingly diverse student population.
   - Develop curriculum and train and encourage staff to respond to new demands of vocational education and economic development.
   - Articulate formally with Chambers of Commerce, the California Business Roundtable and other appropriate organizations (ED>Net is an example).

REVIEW OF THE LITERATURE

THE PROBLEM FOR THE STATE AND THE NATION

In several states, most notably in the South, community colleges and other postsecondary educational institutions are considered primary participants in the economic development activity of the state. Governors and other officials responsible for economic development have stated that education is the backbone of development efforts. However, in California and particularly in the San Francisco Bay Area the role of the community colleges in economic development is less well developed or understood. Nevertheless, the need for economic development and up-to-date vocational education is vital in California, as in other states, if we are to remain competitive in an expanding global economy.

In accepting a recent report from the Commission on Workforce Quality and Labor Market Efficiency, Labor Secretary Elizabeth Dole commented:

> *The skills of our work force have not kept pace with the more complex jobs of today. This skills gap must be bridged if our remarkable economic expansion is to continue and if we are to succeed in the ever-more competitive global marketplace (21).*

SRI International supports that view and points out the particular problems of California:

> *The United States has entered a new era of global competition and falling world commodities prices. The Western region of the United States has been particularly hard hit because of its traditional reliance on natural resource-based commodities industries such as agriculture, forest products, mineral extraction, and energy and the new vulnerabilities of its technology-based industries such as electronics, computers and aerospace (24).*

And the Bay Area Council in "A Guide to Evaluating Employment Training" concludes that:

> *Job training programs are of growing importance to the Bay Area. New technology, increasing national and international competition, and changing demographics are among the forces rapidly transforming the skill needs of Bay Area employers. Businesses confirm that the availability of skilled workers is a crucial element in their competitiveness. And even among those already in the workforce, many Bay Area residents are finding they need more training to compete for available jobs — or to keep their current ones (3).*

Vocational education, always a function of California Community Colleges, has

> *... risen to national prominence as foreign business competition has threatened our nation's status as a world leader in production of goods. As a result, application of technology, human resource development and preparation of a trained work force have become joint priorities in an effort to improve productivity and increase industrial efficiency. At the same time that the demand for highly trained workers has escalated in such fields as aerospace, computers, telecommunications, and other advanced technological industries, unemployment rates among the unskilled, under-educated, economically disadvantaged, and displaced workers have remained relatively high (8).*

THE ROLE OF THE COMMUNITY COLLEGES IN VOCATIONAL EDUCATION

> *California Postsecondary Education is organized through the provisions of a statewide Master Plan, formerly adopted in 1960. The Master Plan defines the missions and responsibilities, admission to, governance, and coordination of California's three postsecondary segments: the California Community Colleges, the California State University and University of California (17).*

The Master Plan remains committed to California's long tradition of offering vocational education through its public educational institutions, recognizing that the rapid transformation in California's economy means a continuing change in the types of available jobs.

> *There is a growing demand for appropriate learning linked to new technologies, and better integration of job-related and broad literacy skills. More and more Californians are changing jobs, needing and seeking upgrading in their abilities, and wanting more capacity to adapt their learning to an ever-changing economic and social environment (17).*

The Joint Committee for the Review of the Master Plan considers California Community Colleges as central to the success of California's entire educational effort and to the future economic and social well-being of California.

> *With hundreds of thousands of Californians enrolled in community college transfer courses, hundreds of thousands in vocational courses, and tens of thousands more in language and skill courses, the community colleges are an integral and indispensable part of California's economic and social infrastructure. Sadly, this truth is often honored more in the breach than by strong support. There is a bad irony here: the community colleges reach the students with the least privilege, and the state provides them the least resources with which to do their essential work (17).*

A study of California's community colleges prepared for the California Roundtable also concluded that

> *the community college programs are by far the largest source of employment preparation, with almost 500 different program titles and more than 5,200 separate programs. About half of all community college students are enrolled in vocational or job training courses. The great majority of these students are enrolled part-time to learn or upgrade job skills, rather than earn a certificate or degree...(4).*

However, as the California Plan for Career-Vocational Education, State Department of education points out:

> *California educators must establish close linkages with employers in the public and private sectors to ensure their career-vocational programs and services reflect working Conditions and employer expectations (7).*

The American Association of State Colleges and Universities points out that all colleges and universities have

> *... an economic impact ranging from their communities and regions to the international market place. More than ever, state policy makers, local government officials, business and labor leaders, and community groups are looking to colleges and universities for assistance in facing economic development problems.(1).*

DEFINITION OF ECONOMIC DEVELOPMENT

According to Verzello's doctoral dissertation, "the California Association for Local Economic Development (CALED) defines economic development as '... the process by which human, financial, capital, physical, and natural resources are mobilized to produce marketable goods and serviced.' CALED cites the following goals of economic development: to improve employment opportunities for local residents, stimulate business activity, expand the tax base, encourage private investment in the community's economy, and improve the overall quality of life within the community.

Long, et al., defines economic development as

> *... the systematic, organized promotion of economic growth and business activity of all kinds. It can involve retail business, manufacturing, agriculture, mining financial industries, education, and*

all types of services. Through more effective use of resources, public relations, or the introduction of additional resources, economic development seeks to encourage new business activity that results in net dollar income, or the infusion of money into the community (18)" (27).

A simpler, but equally useful, definition is that

Economic development is the process of creating new jobs and retaining existing jobs by mobilizing resources to attract new business while helping existing ones to prosper (15).

Verzello continues with the statement: "Providing a means whereby individuals could become productive members of society, support themselves, and contribute to the economic well-being of their community has been among the major concerns of public education. For example, during the 1849 Constitutional Convention of California, the

Constitutional authors felt that education was essential for the eclectic nature of the population, and the charge was given to the legislature to 'encourage by all suit-able means the promotion of intellectual, scientific, moral, and agricultural improvement.' From the start, education in California had the charge of improving agriculture, which was a significant portion of the economy at that time (14).

This original commitment of the State's educational system to enhance economic development is echoed in the renewed master plan for California Postsecondary education. The Commission for Review of the Master Plan for Higher Education, in its second major recommendation, indicated that the mission of elementary, secondary, secondary, and community colleges includes vocational education. Specifically, with respect to community colleges, it states:

The California Community Colleges shall offer academic and vocational instruction at the lower-division level for the great majority of 'college-age' and older students (12).

In its rationale, the Commission states:

. . . that as our economy continues to mature the Community Colleges must take the lead in training men and women for specific occupations (12)" (27).

The current public interest in colleges and university involvement in economic development, according to the American Association of State Colleges and Universities, is

no passing fad, but rather represents a fundamental shift in society's view of higher education

Unless public colleges and universities develop appropriate and effective roles in economic development, many will find that state, community and industry leaders will either begin to impose restrictions or turn to other institutions for their knowledge related need. (2).

OTHER TRAINING PROGRAMS

Concern about both the quantity and quality of America's skilled workforce has given rise to a proliferation of employment training programs according to C. Rose and G. F. Nyre. For example

in California, these programs include the $25 million dollar California Worksite Education and Training Act (CWETA) Program, the newly created $55 million dollar Employment Training Panel, and the multi million dollar dislocated workers retraining program cooperatively funded by the California State Department of Education; the Chancellor's Office, California Community Colleges; General Motors and the United Auto Workers. Employer focused employment training programs are also springing up in adult schools, regional occupational centers and programs, and the community colleges. All of these efforts, created largely in response to staggering unemployment rates and supported by allocations of hundreds of millions of dollars, focus on training unskilled workers and upgrading the skills of dislocated and involuntarily displaced workers who are unemployed because of the structural changes in the economy (20).

Community Colleges have been offering education programs under contract arrangements for several years.

Probably the most important aspect of contractual education in the community colleges is the extent to which the programs meet the training needs of business, industry, or government, and the role of contractual education within the context of the overall duties and responsibilities of community college districts . . . . Those colleges involved feel that not only did they meet the training needs of one segment of their community, but also that they were assisting in the economic development of the entire community (25).

In addition, the Chancellor's Office of the California Community Colleges provides support to the community colleges for new programs serving employers through funding Employer-Based Training (EBT) programs with the intent of supporting business growth and economic development (19).

CALIFORNIA COMMUNITY COLLEGES

Many of California's community colleges have begun recently to assert themselves with renewed

determination as partners in the economic development of their communities. This effort is highlighted by the formation of a statewide Economic Development Network (ED-Net). Individual colleges have opened offices of industry, expanded the use of industry advisory committees and done a variety of other things to demonstrate their interest.

Tom Chmura and John Melville of SRI International, in studying the contract education and other economic development activities of San Francisco Bay Area community colleges, came to a similar conclusion.

> *...many community colleges are already working with employers, but want to expand the scope and effectiveness of their efforts. Others do little or no marketing to employers, aren't organized to deal with the employer community, and may not even have a way to identify the nature of local labor needs (10).*

Chmura and Melville also recognized that many, if not most, industry leaders are not fully aware of the potential that community colleges have for meeting their training needs and for playing a role in other economic development activities (10).

The Bay Area Council, a public policy group representing 300 of the largest companies operating in the San Francisco Bay Area, addressed this issue in a planning session for its Employment and Training Task Force on January 31, 1989. They concluded that California, and particularly the San Francisco Bay Area, lagged the rest of the United States in recognizing the significance of the role educational institutions can play in economic development.

However, community colleges have also begun to explore new approaches to helping their regions adapt to economic change. The industry training consortium is one model that has become increasingly popular in California.

> *In the San Francisco Bay Area, a nationally recognized Telecommunications Training Consortium of local companies worked with the San Mateo County Community College District to design new curriculum and develop a fully-equipped telecommunications laboratory . . . . A community college/industry linkages task force has been organized by the Bay Area Council (a business policy group) to promote further collaboration of this type in the BAy Area (24).*

Also in the San Francisco Bay Area,

> *a group of community colleges has joined with a business group, the Bay Area Council, to form the Employment Training Task Force. The task force works to promote closer ties between the colleges and the needs of industry in the region and supports such efforts as the*

Telecommunications Training Consortium of local companies working with the San Mateo County Community College District (11).

According to Verzello, "California, through the Community College Chancellor's Office, has funded the Economic Development Network (ED-Net).

ED-Net (is) a program designed to coordinate a statewide consortium of community colleges to enhance existing or initiate new economic development programs . . . (14).

Taking an employer's point of view, Chmura and Melville describe a wide variety of ways to make effective use of community colleges. They cite short-term customized training, long-term arrangements for training and other educational services (including on-site degree programs), building an industry training consortium, and utilizing such services as assessment and counseling, placement, facilities and equipment, and participating in cooperative work-study education (10).

One example cited by these authors is a program at Skyline Community College in San Bruno, California, the Toyota Technical Education Network (T-TEN). Toyota Motor Sales, USA has contracted with approximately 50 community and technical college throughout United States to conduct auto mechanic training specific to Toyota's requirements. In return, the auto maker furnishes abroad range of incentives including training for instructors, instructional aides, equipment, curriculum design assistance, student scholarships, and other incentive awards. At this time, the T-TEN program exists only in the United States (10)" (27).

OTHER STATES

Verzello also states, "the literature is filled with examples of economic development activities. Several state government have organized special statewide efforts.

Texas has an industrial Start-Up Training program to provide training for new and expanding businesses. Colorado has a Flexible Industry Related Start-Up Training Program (FIRST) using both community colleges and vocational-technical centers. Ohio has the Ohio Technology Transfer Organization (OTTO) to establish a network of community and technical colleges that provide technical assistance, information and training to businesses by linking research to the marketplace. North Carolina established an Industrial Services Division within the State Board of Community Colleges to assist the Department of Commerce in selling the State's industrial relocation prospects. South Carolina has a 16-college Technical Education System. They funded a 'Design for the 80s' program which studied cooperative education, curriculum revision, special schools, continuing education, and a center for innovative technical training. Six Technical Resource Centers were established to address these cutting edge disciplines advanced office occupations, advanced machine tool

technology, robotics, water quality, computer application, and microelectronics (18, 22, 26).

The state of Michigan funded a study of Michigan automobile suppliers' training needs by a member of one of the community colleges and that led to the establishment of a Community College Office at the Industrial Technology Institute.

> *The purpose of the office is to serve as a means for tapping both research capabilities and technological expertise of the Institute for use by Michigan community colleges. . . (and) . . . part of the Community College Liaison Office function is to ITI use the community college system in the successful deployment of new manufacturing technologies (16).*

An example from Pennsylvania comes from Robert Breuder, president of Williamsport Area Community College (WACC).

> *. . . WACC joined with the Pennsylvania State University and formed the Consortium for Advanced Manufacturing Productivity (CAMP). CAMP's primary focus is to form partnerships with small to medium-sized manufacturers interested in solving practical problems through the introduction of new technology, with resultant outcomes being a demonstrable increase in manufacturing productivity (5)" (27).*

In much of the literature, economic development is considered a major purpose of vocational education, and vocational education is considered a basic mission of community colleges.

CONCLUSION

Community Colleges need new directions including a

> *more explicit remediation role; closer, more formalized ties to industry; increased accountability of vocational education programs; and experiments with technical colleges and economic development centers (23).*

The nature of work is going to change; we can expect that

> *most individuals, because of technological shifts coupled with changes in trade, will be forced to change occupations careers three times, and jobs six to seven times, during their careers (9).*

Vocational education, according to the California Plan for Career-Vocational Education, should become

a full partner in the state's educational enterprise, (should) be recognized for its role in meeting students' needs, and (should) be given a fundamental place in helping . . . the economic development of the state into the twenty-first century (7).

"Pathways to Progress, A Comprehensive Study of Vocational Education," also emphasized that

Given the changing demographics of the State, student demand, the growing need of industry and the State's economic development pattern, The COCCC should emphasize the primary function of vocational education as part of the mission of California Community Colleges (8).

However,

Training that does not insure that there are jobs after training for those who successfully complete the training is of no benefit to trainees (13).

Vocational Education must become

a full partner in the state's educational enterprise, it (must) be recognized for its role in meeting students' needs, and . . . be given a fundamental place in helping (to) continue the economic development of the state into the twenty-first century (7).

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APPENDIX B

BOARD OF GOVERNORS OF THE
CALIFORNIA COMMUNITY COLLEGES
JANUARY 26-27, 1984

TITLE: **VOCATIONAL EDUCATION/EMPLOYMENT TRAINING COMPREHENSIVE POLICY**

STAFF PRESENTATION: **BILL ANDERSON, DIRECTOR OF VOCATIONAL EDUCATION**

SUMMARY:

The Board of Governors has recognized the need for a position statement which will provide direction and guide efforts in coordinating and integrating vocational education and employment training. In October of 1983, the Board initiated the development of a comprehensive position statement to address issues that had been identified and discussed during a panel presentation before the Vocational Education Committee. Following the October meeting, Chancellor's Office staff arranged a workshop, held late in November, to obtain specific suggestions for use in the formulation of policy on vocational education. Results of that workshop were presented as a progress report to the Vocational Education Committee during the December Board meeting. In early January, a second workshop was held to finalize the policy statements and to begin drafting policy implementation strategies.

The policy statements that follow, presented here as an information item, cover eight major areas:

- Comprehensive Vocational Program Planning and Coordination
- Allocation and Use of Funds and Resources for Vocational Education
- Providing Access to Vocational Programs and Meeting Student Needs
- Assessment, Guidance and Counseling Services
- Linkage with the Private Sector and Meeting Employer Needs
- Staffing and Personnel Standards in Vocational Education
- Evaluation and Accountability
- Dissemination of Vocational Education Information

SUGGESTED VOCATIONAL EDUCATION POLICIES FOR CALIFORNIA COMMUNITY COLLEGES

Vocational education is an important part of the mission of California community colleges. What distinguishes community colleges in California is the availability of diverse educational options in the humanities, fine arts, and sciences for those who aspire to transfer to four year colleges as well as for those who elect to gain a general education, improve basic competencies, prepare for employment, career changes and career mobility or life long learning. Thus, within the same institutional setting academic and vocation education abide to provide students a wide range of learning and development opportunities.

It is recognized that the issues of vocational education and job training are best served in the comprehensive community college setting where a balanced career-centered curriculum is available and the integration of student needs and employer needs is addressed.

The policy statements which follow are designed to provide a framework for implementing the philosophy reflected in the previous statements.

Definition of Job Training and Vocational Education

For purposes of funding and administration, federal and state legislation and regulations define vocational education. However, evidence indicates that such definitions are not critical to many community college students who often select individual courses rather than programs to meet their own career or educational goals.

Just as the line between general and vocational education is not always distinct for students, the difference between vocational education and some employment training is not perfectly clear. But for purposes of planning and policy development, it is understood that employment training is an integral part of vocational education. The differences are outlined in he definitions noted below.

- **Job Training** (also called employment training) refers to a planned systematic sequence of instruction or other learning experiences designed to impart skill, knowledge, and attitudes to prepare individuals for immediate employment. Such training is usually intensive, job specific, and of short duration.

- **Vocational Education** (also called occupational education) refers to a planned systematic sequence of instruction or other learning experiences which provide individuals with necessary skills, knowledge, and attitudes to attain entry level employment, occupational advancement, upgrading, or career change. Such occupational preparation should be accompanied by broader educational experiences to assist students achieve longer range career aspirations as well as immediate occupational objectives and is usually of longer duration than shorter term job training.

Guidelines for Interpretation of Policy Statements

Several factors will help the reader understand the policy statements that follow later.

- The policies are intended to be broad guidelines for thinking and decision making in regard to vocational education offered by California community colleges. The policy content provides the framework for more specific strategies, procedures and administrative operations at state and local levels.

- Even though they may be applicable at the local level or even to other agencies, the suggested policies are intended for adoption by the Board of Governors. With changes in the language structure, the suggested policies can be used to frame specific procedures, public information documents or legislative proposals.

- The suggested policy statements are in concert with the existing mission of community colleges and with the existing vocational education goals for community colleges adopted by the Board of Governors.

- The suggested policy statements contain two parts: 1) A general statement defining the values or basic position of the Board of Governors on particular issues related to vocational education; and 2) A set of related specific principles for use as guidelines on what is encompassed by the broader basic statement.

- Within the context of differing State and local responsibilities for program planning and administration, a general preamble to all vocational education policies was suggested by those involved in the policy development process.

- The eight suggested policies are inter-related and may be adopted singly or as a body. The mode of presentation does not reflect the priority of the policies so much as it does a logical sequence for viewing them.

The California Community Colleges Board of Governors recognizes that, within existing law, decision making for individual community colleges is a responsibility of local districts. The role of the Board of Governors in adopting vocational education policies is to set the direction for the comprehensive delivery of vocational education and to assist local community colleges meet the diverse and unique needs of their communities.

▸ COMPREHENSIVE VOCATIONAL PROGRAM PLANNING AND COORDINATION

THE CALIFORNIA COMMUNITY COLLEGES BOARD OF GOVERNORS SHALL encourage and promote vocational program planning and coordination as a shared responsibility of the State and local community colleges.

This effort will:

1. Review existing State statues and regulations related to program planning and modify those elements which inhibit collaborative community college planning with State and local governmental entities, labor organizations, and employers.

2. Retain the role of local community college boards of trustees.

3. Foster close cooperation with appropriate State agencies and other public and private organizations that deliver job training or related support services which enhance the ability of the State to address job training needs and economic development efforts.

4. Provide a mechanism for gathering, compiling, and disseminating pertinent information that will be useful to the State and local community colleges for program planning and improvement.

ALLOCATION AND USE OF FUNDS AND RESOURCES FOR VOCATIONAL EDUCATION

THE CALIFORNIA COMMUNITY COLLEGES BOARD OF GOVERNORS SHALL provide leadership and promote efforts to ensure that community colleges serve as the primary and presumptive delivery system for adult vocational education and employment training programs in California.

This effort will:

1. Affirm intensive job training for immediate employment as an integral part of vocational education and as an appropriate community college responsibility.

2. Advocate a necessary stable funding base for vocational programs using appropriate allocation mechanisms to meet effectively the needs of students and employers served by such programs and to assure the efficient use of available resources.

3. Ensure the systematic and timely allocation of available resources and program funds that accommodate the unique diversity and specific roles of community colleges in the delivery of comprehensive vocational education and shorter term job training programs.

4. Advocate appropriate changes in statutes and regulations which will lead to efficient and flexible vocational program delivery and staffing.

5. Establish partnerships with appropriate public agencies and other employers to work cooperatively to foster improved levels and coordination funding and resources.

6. Inform legislators, public officials and other interested parties that mandated vocational programs, activities, and support services must be adequately funded; that different vocational and job training programs have varying cost structures; and that keeping programs and instructional staff current requires funds for curriculum development, staff development, and procurement, maintenance and replacement of equipment.

PROVIDING ACCESS TO VOCATIONAL PROGRAMS AND MEETING STUDENT NEEDS

THE CALIFORNIA COMMUNITY COLLEGES BOARD OF GOVERNORS SHALL ensure access to vocational education and employment training programs to all students who can benefit from them and who possess necessary competencies to succeed in them.

Such programs will:

1. Meet individual student needs in a responsive and flexible manner.

2. Provide a learning environment that offers current curriculum content, appropriate instructional methods, and is conducive to student training success so that they can enhance their job market value.

3. Provide necessary support services, with the limits of available resources, so that students can participate successfully in vocational and job training programs.

4. Provide articulation with all other appropriate vocational education and job training delivery systems.

ASSESSMENT, GUIDANCE AND COUNSELING SERVICES

THE CALIFORNIA COMMUNITY COLLEGES BOARD OF GOVERNORS SHALL ensure the provision of coordinated and comprehensive assessment, vocational guidance and counseling services to help ensure that students are properly placed in vocational and employment training programs.

Such programs will:

1. Assess student goals and proficiencies for proper program placement or referral.

2. Provide career and vocational guidance.

3. Utilize available state resources to provide assessment and guidance services for students or programs sponsored by other agencies.

4. Provide job placement services for those students who gain necessary employment skills.

5. Utilize information gained from student follow-up and employer feedback to improve assessment and guidance services.

LINKAGE WITH THE PRIVATE SECTOR AND MEETING EMPLOYER NEEDS

THE CALIFORNIA COMMUNITY COLLEGES BOARD OF GOVERNORS SHALL encourage and support the establishment and maintenance of collaborative local efforts between community colleges and employers to meet specific job market and employment training needs. This effort shall be supported by appropriate guidelines developed at the local level between community colleges and employers to ensure the delivery of quality vocational programs.

This effort will:

1. Define the role of advisory committees.

2. Clarify the relationship between community colleges and Private Industry Councils (PICs).

3. Develop stronger communications with the private sector and other employers to achieve more efficient utilization of training resources, ensure current curriculum content, and improve collection, analysis and use of labor market data.

4. Reduce or modify institutional and regulatory barriers which inhibit improved linkage with the private sector and other employers.

5. Utilize student follow-up and employer feedback to determine impact of and satisfaction with training programs and outcomes.

STAFFING AND PERSONNEL STANDARDS IN VOCATIONAL EDUCATION

THE CALIFORNIA COMMUNITY COLLEGES BOARD OF GOVERNORS SHALL ensure that a properly qualified professional staff is available to deliver vocational education and employment training programs.

This effort will:

1. Develop and implement professional standards for qualifying persons responsible for administering community college vocational education and job training programs.

2. Develop and fund activities to design, promote, and implement appropriate new and continuing inservice education and training opportunities for all community college vocational education administrative and instructional staff to keep them current and proficient in their fields of responsibility.

EVALUATION AND ACCOUNTABILITY

THE CALIFORNIA COMMUNITY COLLEGES BOARD OF GOVERNORS SHALL require regular, systematic and comprehensive assessment of vocational programs and services. This process shall be a coordinated endeavor, involving State and local personnel and resources, and shall utilize internal and external expertise to ensure objective and pertinent evaluation results.

This comprehensive evaluation system will:

1. Develop and implement standards for assessing the quality and effectiveness of vocational education and job training programs.

2. Include consistent annual reporting of specified demographic and enrollment

data by identified programs from local community college districts.

3. Involve local program advisory committees and utilization of available institutional and program self-study information.

4. Measure achievement of planned program objectives.

5. Include student and program data elements related to state and federal accountability and reporting requirements.

6. Provide program evaluation results to the State legislature, appropriate agencies, community college districts, and other interested parties so that they can be used for program planning and establishing priorities for resource allocation.

7. Provide adequate funding to carry out the evaluation process effectively.

DISSEMINATION OF VOCATIONAL EDUCATION INFORMATION

THE CALIFORNIA COMMUNITY COLLEGES BOARD OF GOVERNORS SHALL, in a timely manner, inform the general public, State legislature, employers, local community colleges, and interested agencies and organizations about the vocational education and job training programs offered by community colleges in California.

This effort will:

1. Provide a mechanism to gather, compile, and disseminate pertinent information for use by the State and local community colleges as part of their public information programs.

2. Provide, maintain, and support a public information program that is a shared responsibility of the State and local community college districts.

APPENDIX C

VOCATIONAL EDUCATION COURSES IN CALIFORNIA COMMUNITY COLLEGES

AGRICULTURE

Agri-Business
Agri-Chemicals
Agri-Engineering
Agri-General
Agri-Inspection
Agri-Laboratory Tech.
Agri-Mechanics
Agronomy
Animal Husbandry
Animal Science
Artificial Insemination
Crop Production
Dairy Science
Floristry
Food Processing
Gardening
Grounds Maintenance
Horticulture (Ornmtl)
Irrigation Technology
Landscape Design
Livestock Mgt. & Production
Natural Resources
Nursery Business
Nursery Production
Park and Land Management
Plant Science
Poultry Husbandry
Soil Technology
Turf Management
Viticulture

BUSINESS & OFFICE

Accounting
Advertising
Banking and Finance
Bookkeeping
Business (General)
Business Law
Business Machines
Clerical
Computer Information Systems
Court Reporting
Data Processing (Business)
Date Processing Operator
Distributive Education
Duplicator
Escrow
Finance
Insurance
Insurance Adjuster
Key Punch Operator
Merchandising
Merchandising (Clothing)
Merchandising (Display)
PBX Operator
Product Design
Purchasing
Real Estate
Receptionist
Residential Property Management
Secretarial
Secretarial (Bilingual)
Secretarial (Legal)
Secretarial (Medical)
Secretarial (Technical)
Small Bus. Operation
Stenographer
Stenotype
Transcription Machines
Trans. and Distrib.
Transportation (Air)
Word Processing

COMMUNICATIONS

Advertising Design
Art (Commercial)
Art (Painting)
Communications Tech.
Drama
Graphics
Instructional Media
Journalism
Mass Communications
Movie Making
Music
Photography
Production of Publ.
Radio/TV Broadcasting
Sign Language Tech.
Technical Illustration
Technical Writing
Theater Arts
Translation and Interp.

CRIMINAL JUSTICE

Administration of Justice
Conserv. Law Enforcement
Correctional Science
Industrial Security
Prelaw and Court Management
Probat. and Court Management
Special Investigator

ELECTRICAL-ELECTRONICS

Aircraft Electronics
Computer Maintenance
Electrical Const. Maint.
Electrical Consumer
Electrical Indus.
Electrical Power-Dist.
Electrical Supply and Equipment
Electricity
Electro-Mechanics
Electronics Assembly
Electronics Comm.
Electronics Service
Electronics Tech.
Laser Technology
Microwave Technology
Radio/RV Broadcasting
Radio/TV Repair
Semi-Conductor Proc.
Telephone Technology

ENGINEERING & TECHNOLOGY

Aero. Production & Plan.
Architecture
Computer Science Technology
Data Processing
Drafting
Drafting (Arch.)
Drafting (CAD)
Drafting (Civil/Topogrph.)
Drafting (Electro. Mech.)
Drafting (Industrial)
Drafting (Production)
Drafting (Tool Design)
Electro. Mech. Design
Electro. Mech. Engin.
Electronic Microscopy
Engin. Geology Tech.
Engineering Tech.
Engineering Tech. (Civil)
Engineering Tech. Tool Dsng.
Inspection (Building)
Inspection (Housing)
Inspection (Public Works)
Instrumentation
Marine Diving Tech.
Materials Evaluation
Mechanical Tech.
Metallurgical Tech.
Mining
Nuclear Tech.
Optics
Petroleum Tech.
Production Tech.
Quality Control
Surveying
Vacuum Technology

ENVIRONMENTAL & NATURAL RESOURCES

Community Development
Energy Technology
Environmental Tech.
Forestry
Hazardous Materials
Land Fire Control
Natural Resources Mgt.
Parks & Recreation Mgt.
Recreation Land Mgt.
Solar Technology
Solid Waste Mgt.
Timber Management
Urban Planning Dvlp.
Water Resources Tech.
Water Treatment
Wildlife Conservation
Wildlife Management

VOCATIONAL EDUCATION COURSES IN CALIFORNIA COMMUNITY COLLEGES
(Continued)

HEALTH SERVICES

Cardio-Pulmonary
Dental Assisting
Dental Hygiene
Dental Secretary
Emergency Med. Tech.
Health Occupations
Home Health Aide
Medical Assisting
Medical Lab Assistant
Medical Receptionist
Medical Records
Mental-Health Worker
Nephrology Tech.
Nuclear Medical Tech.
Nurse Aide
Nursing Assistant
Nursing Cont. Educ.
Nursing (Intensive Care)
Nursing (RN)
Nursing (Reg. Refresher)
Nursing (Team)
Nursing (Vocational)
Occupational Therapy
Operating Room Tech.
Ophthalmic Assistant
Orderly
Orthopedic Assistant
Paramedic
Pediatric Assistant
Physical Therapy Assist.
Psychiatric Tech.
Psychological Services
Resp. Inhalation Therapy
X-ray Technician

HOME ECONOMICS & FOOD SERVICES

Baking
Catering
Chef Training
Clothing & Textiles
Clothing Manuft. Assist.
Consumer Homemaking
Costume Design
Culinary Arts
Dietary Technician
Dress Designing
Dressmaking
Fashion Arts
Food Preparation
Food Service
Foods & Nutrition
Home Economics
Institutional Cook
Interior Design & Furn.
Merchandising (Fashion)
Seamstress & Alter. Spec.
Sewing (Vocational)

MID-MANAGEMENT & SUPERVISION

Administrative Assistant
Airport Management Assistant
Business Administration
Construction Management
Food Service Management
Grocery Merch. & Management
Hotel-Motel Management
Industrial Super. Management
Marketing
Nursing Home Administration
Office Administration
Police Supervision
Public Administration
Restaurant Management
Supervision
Supervision (Government)

SCIENCE & LABORATORY OCCUPATIONS

Animal Lab. Tech.
Archaeology Tech.
Bio-Medical Tech.
Chemical Lab. Tech.
Dental Lab. Tech.
Electronics Res. Tech.
Geology Lab. Tech.
Hospital Pharmacy Tech.
Marine Tech.
Mortuary Science
Optometric Tech.
Physical Science Tech.
Prosthetics-Orthotics
Science Technology

SERVICE OCCUPATIONS

Aero Flight
Aero Ground School
Airport Services
Air Traffic Control
Alcohol Studies
Comm. Health Services
Community Service Aide
Cosmetology
Counseling Tech.
Drycleaning
Early childhood Educ.
Fire Science
Flight Attendant
Historical Preservation
Human Services
Industrial Relations
Instructional Aide
Legal Assistant
Library Tech.
Manicuring
Public Relations
Public Service
Recreation Leadership
Search & Rescue
Social Service Aide
Special Educ. Aide
Travel Agent

TRADE & INDUSTRIES

Air Conditioning & Refrig.
Aircraft Maint.
Airframe & Powerplant
Appliance Repair
Auto Body & Fender
Automated Elec. Cntrl.
Auto Machinist
Auto Technology
Auto Parts Counter
Business Equip. Repair
Cabinet & Millwork
Carpentry
Construction Technology
Diesel Mechanic
Driving (Commer. Vhcl.)
Fisheries (Commercial)
Fluid Power
Gunsmithing
Heating & Ventilation
Heavy Equip. Mechanic
Horseshoing
Industrial Safety
Industrial Technology
Ironworking
Machine Tool Technology
Manufacturing
Marine Mechanics
Metal Technology
Metrology
Motorcycle Repair
Musical Instrument Repair
Numerical Control
Piano Repair
Plastics Production
Plumbing
Printing
Sewing (Power)
Sheet Metal
Sign Painting
Small Engine Repair
Stationary Engineering
Tailoring
Tool & Die
Upholstery
Vending Machine Repair
Welding
Wood Technology

SOURCE: Leo Myer Associates, Inc. *1987-88 Occupational Programs in California Public Community Colleges.* Hayward, CA: 1987.

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FEB 0 2 1991